

CD-R゙V


For canceling the display demonstration, see page 7 .
ดูที่หน้า 7 เพื่อยกเลิกการสาธิตภาพประกอบ

For installation and connections, refer to the separate manual. กรุณาดูคูมื่อที่แยกต่างหาก ในการติดตั้งและการเชื่อมต่อ

## /|||///// INSTRUCTIONS <br> คำแนะนำ

Thank you for purchasing a JVC product.
Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

## IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. CAUTION: Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED OUTSIDE THE UNIT.

| CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. | ADVARSEL : Synlig og usynlig laserstráling nảr maskinen er ảben eller interlocken fejer. Undgå direkte eksponering til strảling. | VARNING : Synlig och osynlig laserstråning när den öppnas och spärren är urkopplad. Betrakta strålen. | VARO : Avattaessa ja suojalukitus ohitetuna tai viallisena olet altinna nähvväle ja näkymätoömälle lasersäteilyle. Vältä säteen kohdistumista suoraan isseesi. (f) |
| :---: | :---: | :---: | :---: |

## Warning:

If you need to operate the receiver while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

## How to reset your unit



- This will reset the microcomputer. Your preset adjustments will also be erased.
- If a disc is loaded, it will eject. Be careful not to drop the disc.


## How to forcibly eject a disc

If a disc cannot be recognized by the receiver or cannot be ejected, ejects the disc as follows.
©/I/ATT


- If this does not work, try to reset your receiver.
- Be careful not to drop the disc when it ejects.


## Contents

How to reset your unit ..... 2
How to forcibly eject a disc ..... 2
How to read this manual ..... 4
How to use the MODE button ..... 4
Control panel
— KD-G116/KD-G115 ..... 5
Parts identification ..... 5
Getting started ..... 6
Basic operations ..... 6
Canceling the display demonstrations ..... 7
Setting the clock ..... 7
Radio operations ..... 8
Listening to the radio ..... 8
Storing stations in memory ..... 9
Listening to a preset station ..... 9
Disc operations ..... 10
Playing a disc ..... 10
Selecting the playback modes ..... 11

## *For safety....

- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.
Sound adjustments ..... 12
Selecting preset sound modes (C-EQ: custom equalizer) ..... 12
Adjusting the sound ..... 13
General settings - PSM ..... 14
Basic procedure ..... 14
Detaching the control panel ..... 15
Maintenance ..... 16
More about this receiver ..... 17

Troubleshooting

Troubleshooting .....  ..... 18 .....  ..... 18
Specifications
Specifications ..... 19 ..... 19

How to read this manual
The following methods are used to made the explanations simple and easy-to-understand:

- Some related tips and notes are explained in "More about this receiver" (see page 17).
- Button operations are mainly explained with the illustrations as follows:
Press briefly.
Press and hold until
your desired response
begins.


## 「. How to use the MODE button

If you press MODE, the receiver goes into functions mode, then the number buttons work as different function buttons.

Ex.: When number button 2 works as MO (monaural) button.


To use these buttons for original functions again after pressing MODE, wait for 5 seconds without pressing any of these buttons until the functions mode is cleared.

- Pressing MODE again also clears the functions mode.


## Control panel - KD-G116/KD-G115

## Parts identification



1 +/- buttons
2 DISP (display) button
3 Loading slot
4 Display window
5 MODE button
6 ́ (eject) button

8 山/I/ATT (standby/on/attenuator) button
9 SEL (select) button
10 MO (monaural) button
11 SSM (Strong-station Sequential Memory) button
12 CD button
13 FM/AM button
14 RPT (repeat) button
15 RND (random) button
16 EQ (equalizer) button
17 내( (control panel release) button
18 Number buttons

## Display window

19 Tuner reception indicators MO (monaural), ST (stereo)
20 CD indicator
21 RND © (disc random) indicator
22 RPT (repeat) indicator
23 LOUD (loudness) indicator
24 EQ (equalizer) indicator
25 Sound mode (C-EQ: custom equalizer) indicators
ROCK, CLASSIC, POPS, HIP HOP, JAZZ, USER

- umun also works as the time countdown indicator.
26 Main display
27 Source display
Volume level indicator


## Getting started



(1)
J/I/ATT


2


You cannot select "CD" as the playback source if there is no disc in the loading slot.

3


Volume level appears.


Adjust the sound as you want.
(See pages 12 and 13.)

## To drop the volume in a moment (ATT)

©/I/ATT


To restore the sound, press it again.

To turn off the power
©/I/ATT


## Caution on volume setting:

Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

## Canceling the display demonstrations

If no operations are done for about 20 seconds， display demonstration starts．
［Initial：DEMO ON］—see page 14.
1


2


3


4 Finish the procedure．


## To activate the display demonstration

In step $\mathbf{3}$ above．．．


To check the current clock time when the

DISP


## receiver is turned off

2 Set the hour and minute． 1 Select＂CLOCK H＂（hour），then adjust the hour．
2 Select＂CLOCK M＂（minute）， then adjust the minute．


3 Finish the procedure．


## Radio operations




Lights up when receiving an FM stereo broadcast with sufficient signal strength.


2
Start searching for a station.


When a station is received, searching stops.
To stop searching, press the same button again.

## To tune in to a station manually

In step 2 above...
1


2 Select the desired station frequencies.


When an FM stereo broadcast is hard to receive


2


Lights up when monaural mode is activated.


Reception improves, but stereo effect will be lost.

To restore the stereo effect, repeat the same procedure so that the MO indicator goes off.

## Storing stations in memory

You can preset six stations for each band.
FM station automatic presettingSSM (Strong-station Sequential Memory)
1 Select the FM band (FM1 - FM3) you want to store into.


2


3

"SSM" flashes, then disappears when automatic presetting is over.

Local FM stations with the strongest signals are searched and stored automatically in the FM band.

## Manual presetting

Ex.: Storing FM station of 92.5 MHz into the preset number 4 of the FM1 band.

1


## 2




3


Preset number flashes for a while.

## Listening to a preset station



2 Select the preset station (1-6) you want.


To check the current clock time while listening to an FM or AM station

DISP


## Disc operations

## Playing a disc



All tracks will be played repeatedly until you stop playback.


Total playing time of Total track number the inserted disc of the inserted disc


## Elapsed playing Current track time number

## To stop play and eject the disc



To fast-forward or reverse the track


Fast-forwards.

To go to the next or previous tracks


To the beginning of the current track, then the previous tracks.

To go to a particular track directly
To select a number from $01-06$ :


To select a number from $07-12$ :


## Prohibiting disc ejection

You can lock a disc in the loading slot.


To check the current clock time while
listening to a disc
DISP


To cancel the prohibition, repeat the same procedure.

## Selecting the playback modes

You can use only one of the following playback modes at a time.
1


2 Select your desired playback mode.

| Repeat play | Mode | Plays repeatedly |
| :---: | :---: | :---: |
|  | TRK RPT: RPT OFF: | The current track. <br> - RPT lights up. <br> Cancels repeat play. |
|  |  |  |

Ex.: When "TRK RPT" is selected

| Random play | Mode | Plays at random |
| :---: | :---: | :---: |
|  | DISC RND: All tracks of the current disc. <br> - RND © lights up. <br> RND OFF: Cancels random play. |  |
|  |  |  |
| Ex.: When "DISC RND" is selected |  |  |

## Sound adjustments



You can select a preset sound mode suitable to the music genre.


Ex.: When "ROCK" is selected

Indication pattern for each sound mode:


| Indication | For: |  | Preset values |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | BAS*1 $^{2}$ | TRE*2 $^{\text {LOUD*3 }}$ |  |  |
| USER | (Flat sound) | 00 | 00 | OFF |  |
| ROCK | Rock or disco <br> music | +03 | +01 | ON |  |
| CLASSIC | Classical <br> music | +01 | -02 | OFF |  |
| POPS | Light music | +04 | +01 | OFF |  |
| HIP HOP | Funk or rap <br> music | +02 | 00 | ON |  |
| JAZZ | Jazz music | +02 | +03 | OFF |  |

*1 BAS: Bass
*2 TRE: Treble
*3 LOUD: Loudness

## Adjusting the sound

You can adjust the sound characteristics to your preference.


Ex.: When "TRE" is selected
2


| Indication | To do: | Range |
| :--- | :--- | :--- |
| BAS*1 <br> (bass) | Adjust the bass. | -06 (min.) <br> to <br> +06 (max.) |
| TRE*1 <br> (treble) | Adjust the treble. | -06 (min.) <br> to <br> +06 (max.) |
| FAD*2 <br> (fader) | Adjust the front <br> and rear speaker <br> balance. | R06 (Rear <br> only) <br> to <br> F06 (Front <br> only) |
| BAL <br> (balance) | Adjust the left <br> and right speaker <br> balance. | L06 (Left <br> only) <br> to <br> R06 (Right <br> only) |
| LOUD*1 <br> (loudness) | Boost low and <br> high frequencies <br> to produce a well- <br> balanced sound at <br> low volume level. | LOUD ON <br> LOUD OFF |
| VOL*3 <br> (volume) | Adjust the <br> volume. | 00 (min.) to <br> 30 or 50 <br> (max.)* |

*1 When you adjust the bass, treble, or loudness, the adjustment you have made is stored for the currently selected sound mode (C-EQ) including "USER."
*2 If you are using a two-speaker system, set the fader level to "00."
*3 Normally the +/- buttons work as the volume control. So you do not have to select "VOL" to adjust the volume level.
*4 Depending on the amplifier gain control setting. (See page 14 for details.)

## General settings - PSM

$\square$ Basic procedure

You can change PSM (Preferred Setting Mode) items listed in the table that follows.


2 Select a PSM item.


Ex.: When you select "AMP GAIN"

3 Adjust the PSM item selected.


4 Repeat steps 2 and 3 to adjust the other PSM items if necessary.

## 5 Finish the procedure.



Indications
DEMO
Display demonstration

Selectable settings, [reference page]
DEMO ON: [Initial]; Display demonstration will be activated automatically if no operation is done for about 20 seconds, [7].
DEMO OFF: Cancels.

1-12, [7]
[Initial: 1 (1:00)]

CLOCK M
Minute adjustment
$00-59$, [7]
[Initial: 00 (1:00)]

AMP GAIN
Amplifier gain control

You can change the maximum volume level of this receiver.
LOW PWR: VOL 00 - VOL 30 (Select this if the maximum power of the speaker is less than 50 W to prevent them from damaging the speaker.)
HIGH PWR: [Initial]; VOL 00 - VOL 50

## Detaching the control panel



When detaching or attaching the control panel, be careful not to damage the connectors on the back of the control panel and on the panel holder.

## Detaching the control panel

Before detaching the control panel, be sure to turn off the power.

## 1



2


3



2

## Maintenance

## How to clean the connectors

Frequent detachment will deteriorate the connectors.
To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.


## Moisture condensation

Moisture may condense on the lens inside the CD player in the following cases:

- After starting the heater in the car.
- If it becomes very humid inside the car. Should this occur, the CD player may malfunction. In this case, eject the disc and leave the receiver turned on for a few hours until the moisture evaporates.


## How to handle discs

When removing a disc from its case, press down the center holder of the case and lift the disc out, holding it by the edges.

Center holder


- Always hold the disc by the edges. Do not touch its recording surface.
When storing a disc into its case, gently insert the disc around the center holder (with the printed surface facing up).
- Make sure to store discs into the cases after use.

Do not use the following dises:


Sticker


Sticker
residue


## More about this receiver

## Basic operations

## Turning off the power

- If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.


## Tuner operations

## Storing stations in memory

- During SSM search...
- All previously stored stations are erased and stations are stored newly.
- Received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).
- When SSM is over, the station stored in No. 1 will be automatically tuned in.
- When storing a station manually, a previously preset station is erased when a new station is stored in the same preset number.


## Disc operations

## General

- This receiver has been designed to reproduce CDs, and CD-Rs (Recordable)/ CD-RWs (Rewritable) in audio CD (CD-DA) format.
- When a disc has been loaded, selecting "CD" for the playback source starts disc play.


## Inserting a disc

- When a disc is inserted upside down, the disc automatically ejects.
- Do not insert 8 cm discs (single CD) and unusual shape discs (heart, flower, etc.) into the loading slot.


## Playing a CD-R or CD-RW

- Use only "finalized" CD-Rs or CD-RWs.
- This receiver can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some CD-Rs or CD-RWs may not play back on this receiver because of their disc characteristics, and for the following causes:
- Discs are dirty or scratched.
- Moisture condensation occurs on the lens inside the receiver.
- The pickup lens inside the receiver is dirty.
- CD-R or CD-RW on which the files are written with "Packet Write" method.
- There are improper recording conditions (missing data, etc.) or media conditions (stain, scratch, warp, etc.).
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.
- Do not use the following CD-Rs or CD-RWs:
- Discs with stickers, labels, or protective seal stuck to the surface.
- Discs on which labels can be directly printed by an ink jet printer.
Using these discs under high temperatures or high humidity may cause malfunctions or damage to discs.


## Changing the source

- If you change the source, playback also stops (without ejecting the disc).
Next time you select "CD" for the playback source, disc play starts from where it has been stopped previously.


## Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to prevent it from dust. (Disc will not play this time.)


## General settings-PSM

- If you change the "AMP GAIN" setting from "HIGH PWR" to "LOW PWR" while the volume level is set higher than "VOL 30," the receiver automatically changes the volume level to "VOL 30."


## Troubleshooting

What appears to be trouble is not always serious. Check the following points before calling a service center.

|  | Symptoms | Causes | Remedies |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 흔 } \\ & \text { ©0 } \end{aligned}$ | - Sound cannot be heard from the speakers. | The volume level is set to the minimum level. | Adjust it to the optimum level. |
|  |  | Connections are incorrect. | Check the cords and connections. |
|  | - The receiver does not work at all. | The built-in microcomputer may have functioned incorrectly due to noise, etc. | Reset the receiver (see page 2). |
| $\sum_{i k}^{k}$ | - SSM automatic presetting does not work. | Signals are too weak. | Store stations manually. |
|  | - Static noise while listening to the radio. | The antenna is not connected firmly. | Connect the antenna firmly. |
| 늘를등 | - Disc automatically ejects. | Disc is inserted upside down. | Insert the disc correctly. |
|  | - CD-R/CD-RW cannot be played back. <br> - Tracks on the CD-R/ CD-RW cannot be skipped. | CD-R/CD-RW is not finalized. | - Insert a finalized CD-R/ CD-RW. <br> - Finalize the CD-R/ CD-RW with the component which you used for recording. |
|  | - Disc can be neither played back nor ejected. | Disc is locked. | Unlock the disc (see page 11). |
|  |  | The CD player may have functioned incorrectly. | Eject the disc forcibly (see page 2). |
|  | - Disc sound is sometimes interrupted. | You are driving on rough roads. | Stop playback while driving on rough roads. |
|  |  | Disc is scratched. | Change the disc. |
|  |  | Connections are incorrect. | Check the cords and connections. |
|  | - "NO DISC" appears on the display. | No disc is in the loading slot. | Insert a disc into the loading slot. |
|  |  | Disc is inserted incorrectly. | Insert the disc correctly. |

## Specifications

## AUDIO AMPLIFIER SECTION

Maximum Power Output:
Front: 50 W per channel
Rear: 50 W per channel
Continuous Power Output (RMS):
Front: 19 W per channel into $4 \Omega, 40 \mathrm{~Hz}$ to 20000 Hz at no more than $0.8 \%$ total harmonic distortion.
Rear: 19 W per channel into $4 \Omega, 40 \mathrm{~Hz}$ to 20000 Hz at no more than $0.8 \%$ total harmonic distortion.
Load Impedance: $4 \Omega$ ( $4 \Omega$ to $8 \Omega$ allowance)
Tone Control Range:
Bass: $\pm 10 \mathrm{~dB}$ at 100 Hz
Treble: $\pm 10 \mathrm{~dB}$ at 10 kHz
Frequency Response: 40 Hz to 20000 Hz
Signal-to-Noise Ratio: 70 dB
Line-Out Level/Impedance:
$2.0 \mathrm{~V} / 20 \mathrm{k} \Omega$ load (full scale)
Output Impedance: $1 \mathrm{k} \Omega$

## TUNER SECTION

Frequency Range:
FM: $\quad 87.5 \mathrm{MHz}$ to 108.0 MHz
AM: $\quad 531 \mathrm{kHz}$ to 1602 kHz

## [FM Tuner]

Usable Sensitivity: $11.3 \mathrm{dBf}(1.0 \mu \mathrm{~V} / 75 \Omega)$
50 dB Quieting Sensitivity:
$16.3 \mathrm{dBf}(1.8 \mu \mathrm{~V} / 75 \Omega)$
Alternate Channel Selectivity ( 400 kHz ): 65 dB
Frequency Response: 40 Hz to 15000 Hz
Stereo Separation: 35 dB
Capture Ratio: 1.5 dB

## CD PLAYER SECTION

Type: Compact disc player
Signal Detection System: Non-contact optical pickup (semiconductor laser)
Number of channels: 2 channels (stereo)
Frequency Response: 5 Hz to 20000 Hz
Dynamic Range: 96 dB
Signal-to-Noise Ratio: 98 dB
Wow and Flutter: Less than measurable limit

## GENERAL

Power Requirement: Operating Voltage: DC 14.4 V (11 V to 16 V allowance)
Grounding System: Negative ground
Allowable Operating Temperature:
$0^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
Dimensions ( $\mathrm{W} \times \mathrm{H} \times \mathrm{D}$ ):
Installation Size (approx.):
$182 \mathrm{~mm} \times 52 \mathrm{~mm} \times 150 \mathrm{~mm}$ Panel Size (approx.):
$188 \mathrm{~mm} \times 58 \mathrm{~mm} \times 11 \mathrm{~mm}$
Mass (approx.):
1.3 kg (excluding accessories)

Design and specifications are subject to change without notice.

## JVC

# JVL <br> KD-G116/KD-G115 <br> Installation/Connection Manual <br> การติตตั้/ ถู่มี่อกรติตัตั้ง 

This receiver is designed to operate on 12 V DC, NEGATIVE ground electrical systems. If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC car audio dealers.


## INSTALLATION (IN-DASH MOUNTING)

The following illustration shows a typical installation. If you have any questions or require information regarding installation kits, consult your JVC car audio dealer or a company supplying kits.

- If you are not sure how to install this receiver correctly, have it installed by a qualified technician.

ไทย
ชุดประกอบนี้ได้รับการออกแบบมาเพื่อใช้งานกับระบบ กระแส่ไฟฟ้าสายดินขั้วลบกระแสตรง 12 โวลท์ หากรถยนต์ของดุณไไ่ไ ด้ใช้ระบบนี้ ต้องใช้เครื่องแปลงกระแส้ไฟช่วย ซึ่งสามารถหาซื้อได้จากร้านขายเครื่องเสียงรถยนต์ JVC

รายการส่วปประกอบสำหรับติดตั้งและเชื่อมต่อกัน
สวนประกอบต่อไปนี้ใหมากับชุดประกอบนี้ หลังจากตรวจสอบแล้ว ปรับตั้งเครื่องให้ถูกต้อง

(4)
(1)

Handles คันบังคับ

การติดตั้ง (การประกอบแผงหน้าปัทม่เข้า)
ภาพตัวอย่างต่อไปนี้แสดงถึงการติดตั้งแบบทั่วไป หากคุณมีปัญหาหรือต้องการข้อมลเกี่ยวกับชดติดตั้ง กรุณาปรึกษากับผูขายเครื่องเสี ยงรถยนต์ JVC ของท่านหรือบริษั

- ชุดประกอบ ถ้าคุณไม่แน่ใจวาติตตั้งชุดประกอบนี้ถูกต้องหรือไม่ ให้หาช่างผู้เชี่ยวชาญเเป็ผผูติดตั้ง


Removing the receiver
Before removing the receiver, release the rear section.

## การถอดชุดประกอบ

ก่อนจะถดดชุดประกอบ ให้ปลดหน้าตัดส่วนท้ายก่อน


When using the optional stay / เมื่อใชตัวยึดแบบเลือกได



Install the receiver at an angle of less than $30^{\circ}$ ติดตั้งชุดประกอบที่มุมต่ำกว่า 30 องศา

When installing the receiver without using the sleeve / เมื่อติดตั้งชุดประกอบโดยไม่ใชปลอกหุม
In a Toyota for example, first remove the car radio and install the receiver in its place.
ตัวอย่างเช่น ในรถยนต์โตโยต้า ให้ออดวิทยุติดรถยนต์ออกก่อนและติดตั้งชุดประกอบนี้เข้ไปแทน
Flat type screws
$(\mathrm{M} 5 \times 8 \mathrm{~mm})^{*}$
กรั่วเรีบ
$(\mathrm{M} 5 \times 8$ มิลลิเมตร)*

Note : When installing the receiver on the mounting bracket, make sure to use the 8 mm -long screws. If longer screws are used, they could damage the receiver.
หมายเหต : เมื่อติดตั้งชุดประกอบลงในแท่นรองรับวว้ ให้ใช้สกรูยาวขนาด 8 มิลลิเมตร ถ้าใช้สกรูยาวกว่านี้อาจทำให้ชุดประกอบเสียหยย้ด้

## TROUBLESHOOTING

The fuse blows.

* Are the red and black leads connected correctly?
- Power cannot be turned on.
* Is the yellow lead connected?
- No sound from the speakers.
* Is the speaker output lead short-circuited?
- Sound is distorted
* Is the speaker output lead grounded?
* Are the "-" terminals of $L$ and $R$ speakers grounded in common?
- Noise interfere with sounds.
* Is the rear ground terminal connected to the car's chassis using shorter and thicker cords?
- Receiver becomes hot.
* Is the speaker output lead grounded?
* Are the "-" terminals of $L$ and $R$ speakers grounded in common?
- This receiver does not work at all.
* Have you reset your receiver?


## การตรวจสอบปัญหาขัดข้อง

- ฟิส์ขาด
* มีการเชื่อม ายตะกั่วสีดำและสีแดงอย่างถูกต้องหรือไม่
- ไม่สามารถเปิดเครื่องได้
* มีการเชื่อมสยยะกั่าสี่เหลืองหรือไม่
- ไม่มีเสียงออกจากลำโพง
* สายตะกั่วสวนที่ออกทางลำโพงเกิดไฟฟ้าลัดวงจรหรือไม่
- เสียงเพี้ยน
* สยตตกั่วสวนที่ออกทางลำโพงต่อกงดินหรือไม่
* สยงขั้วลบ "-" ของลำโพงด้านซาายและขวาต่อลงดินตามปกติหรือไม่
- เสียงรบูกวน
* มีการใช้สายสั้นๆ หรือหนาๆ ต่อจากเครื่องสวนที่ติดตั้ง ไว้บนพื้นด้านหลังกับตัวถังรถยนต์หรือไม่
- ชุดประกอบรุอนบึ้น
* ส่ยตัะกั่วส่วนที่ออกทางลำโูงตู่อลงดินหรือไม่
* สายขั้วลบ "-" ของลำโพงด้านซายและขวาต่อลงดินตามปกติหรือไม่
- เครื่องรับนี้ทำงานไม

1 * ทานได้ตั้งเคื่องใหมแลววหรือยัง

## ElECTRICAL CONNECTIONS

To prevent short circuits, we recommend that you disconnect the battery's negative terminal and make all electrical connections before installing the receive

- Be sure to ground this receiver to the car's chassis again after installation


## Notes:

- Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC car audio dealer.
- It is recommended to connect to the speakers with maximum power of more than 50 W (both at the rear and at the front, with an impedance of $4 \Omega$ to $8 \Omega$ ). If the maximum power is less than 50 W , change "AMP GAIN" setting to prevent the speakers
from being damaged (see page 14 of the INSTRUCTIONS).
To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape.
The heat sink becomes very hot after use. Be
careful not to touch it when removing this receiver.


## การเชื่อมโดยใช้ไฟฟ้า

 - ตรวจสอบใหแนใจวาไดเดินสายดินตอระหวางเครื่องกับตัวถัง รถยนตใหมแลวหลังจากติดตั้ง

หมายเหตุ:

- ใชพิกัดจำเพาะแทนฟีวส หากฟีวส์ขาดบอย ใหปรึกษาร้า นขายเครื่องเสียงรถยนต์ JVC
- ขอแนะนำใหต่ตอลำโพง ที่มีกำลังขับสงสุดเกินกว่า 50 W (ทั้งด้านหน้าและด้านหลัง มีคาความต้านทาน $4 \Omega$ ถึง $8 \Omega$ )

ถ้ากำลังขับต่ำกว่า 50 W ให้เปลี่ยนคา "AMP GAIN" เพื่อป้องกันไม่ให้ำโพงชำรุด (ดูหน้า 14 คำแนะนำ)

- การป้องกันการลัดวงจร จะต้องพันขั้วสายตะกั่ว ที่ไม่ใช้แล้วด้วยเท ปพันสายไฟ
- แผ่ระบายความร้อนจะร้อนมากหลังจากใช้ ระมัดระวังอยาไป สัมผัสเมื่อถอดชดประกอบนี้


## Typical connections / การเชื่อมต่อแบบปกติ

Before connecting: Check the wiring in the vehicle carefully. Incorrect connection may cause serious damage to this receiver.
The leads of the power cord and those of the connector from the car body may be different in color.

1 Connect the colored leads of the power cord in the order specified in the illustration below.
2 Connect the antenna cord.
3 Finally connect the wiring harness to the receiver.

กอตทำกาศเชตอมตอ: ตศวจ อศกาศเดิศ ายไฟใศศศยศตอยางตะมัดศะวัอยาใหผิดพตาดใศกาศเชตอมตอชุดปศะกอศชุดศี กาศเชศอมตอผิดพศาดอาจทำใหเกิดความเี ยหายศายแศงกัศชุดปตะ
กอศศี้ได้าศตะกั่วของ ายไฟ แตะของอุปกตต์ต่อเชต่อมจากตัวต งตตอาจมี ที่ไม่เหมตอศกัศ

1 ต่อสายไฟสีตามลำดับที่ระบุในรูปด้านล่าง
2 เชื่อมต่อกับสายอากาศ
3 สุดท้าย ต่อส่วนควบคุมการเดินสายไฟเข้ากับชุดประกอบชุดนี้


## B Connecting the external amplifier / การต่อเพิ่มเติมเข้ากับอุปกรณอื่น

You can connect an amplifier to upgrade your car stereo system.

- Connect the remote lead (blue with white stripe) to the remote lead of the other equipment so that it can be controlled through this receiver
Disconnect the speakers from this receiver, connect them to the amplifier. Leave the speaker leads of this receiver unused.

คุณสามารถตอกับแอมพลิฟายเออร เพื่อเพิ่มคุณ ภาพเสียงใหกับระบบสเตอริโอของรถยนต

- ต่อสายตะกั่วระยะไกล (สีน้ำเงินลายขาว) เข้ากับสายตะกั่วระยะไกลของอุปกรณอื่น ๆ เพื่อจะสามารถควบคุมโดยชุดประ กอบนี้ได้
- ถอดลำโพงออกจากชุดประกอบนี้ แล้วต่อเข้ากับเครื่องขยาย ทิ้งสายตะกั่วลำโพงของชุดประกอบนี้ไว้


Signal cord (not supplied for this receiver) ายเคเบิลสัญญาณ (ไม่ได้ให้มากับชุดประกอบนี้) $\square$

Remote lead Y-connector (not supplied for this receiver) ายตะกั่วตะยะไกต ขอต่อรูปตัว $Y$ (ไม่ได้ให้มากับชุดประกอบนี้)

Remote lead (Blue with white stripe) ายตะกั่วตะยะไกต (สีน้ำเงินลายขาว)

*3 Firmly attach the ground wire to the metallic body or to the chassis of the car-to the place not coated with paint (if coated with paint, remove the paint before attaching the wire). Failure to do so may cause damage to the receiver.
*3 ต่อลวดสายดินให้แนนเข้ากับตัวถังเหล็ก หรือตัวถังรถ-ตรงส่วน ที่ไม่มีสีเคลือบ (หากมีสีเคลือบอยู ใหขูดสีออกกอน กอนต่อลวดสายดิน) หากไม่ปฏิบัติตามคำแนะ นำนี้ เครื่องอาจชำรุดหรือเสียหายได

PRECAUTIONS on power supply and speaker connections: - DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the receiver will be seriously damaged.

- BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car.


## ข้อควรระวังสำหรับการต่อแหล่งจ่ายกำลังและลำโพง:

- อย่าต่อสายตะกั่วเเเบิลกำลังของลำโพงเบ้ากับแบขเตอรี่รดยนต์ มิฉะนั้น ธุดูระกอบจะได้รั บความเสียหายมาก
- ก่อนที่จะต่อสายตะกั่วเคเบิกกำลังของลำโพงเข้กกับลำโพง ให้ตรวจสอบการเดินสยยไฟลำโพ งในรถของคุณให้รียบบรอยเสียกอน



## JVC



## ALAT PENERIMA CD

## KD-G116/KD-G115



CD-RHV


For canceling the display demonstration, see page 7 .
Untuk membatalkan tampilan demonstrasi, lihat halaman 7.

For installation and connections, refer to the separate manual.
Untuk instalasi dan penyambungan, lihat buku pedoman terpisah.

Thank you for purchasing a JVC product.
Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

## IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. CAUTION: Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED OUTSIDE THE UNIT.

| CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. | ADVARSEL : Synlig og usynlig laserstráling nảr maskinen er ảben eller interlocken fejer. Undgå direkte eksponering til strảling. | VARNING : Synlig och osynlig laserstråning när den öppnas och spärren är urkopplad. Betrakta strålen. | VARO : Avattaessa ja suojalukitus ohitetuna tai viallisena olet altinna nähvväle ja näkymätoömälle lasersäteilyle. Vältä säteen kohdistumista suoraan isseesi. (f) |
| :---: | :---: | :---: | :---: |

## Warning:

If you need to operate the receiver while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

## How to reset your unit



- This will reset the microcomputer. Your preset adjustments will also be erased.
- If a disc is loaded, it will eject. Be careful not to drop the disc.


## How to forcibly eject a disc

If a disc cannot be recognized by the receiver or cannot be ejected, ejects the disc as follows.
©/I/ATT


- If this does not work, try to reset your receiver.
- Be careful not to drop the disc when it ejects.


## Contents

How to reset your unit ..... 2
How to forcibly eject a disc ..... 2
How to read this manual ..... 4
How to use the MODE button ..... 4
Control panel
— KD-G116/KD-G115 ..... 5
Parts identification ..... 5
Getting started ..... 6
Basic operations ..... 6
Canceling the display demonstrations ..... 7
Setting the clock ..... 7
Radio operations ..... 8
Listening to the radio ..... 8
Storing stations in memory ..... 9
Listening to a preset station ..... 9
Disc operations ..... 10
Playing a disc ..... 10
Selecting the playback modes ..... 11

## *For safety....

- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.
Sound adjustments ..... 12
Selecting preset sound modes (C-EQ: custom equalizer) ..... 12
Adjusting the sound ..... 13
General settings - PSM ..... 14
Basic procedure ..... 14
Detaching the control panel ..... 15
Maintenance ..... 16
More about this receiver ..... 17

Troubleshooting

Troubleshooting .....  ..... 18 .....  ..... 18
Specifications
Specifications ..... 19 ..... 19

How to read this manual
The following methods are used to made the explanations simple and easy-to-understand:

- Some related tips and notes are explained in "More about this receiver" (see page 17).
- Button operations are mainly explained with the illustrations as follows:
Press briefly.
Press and hold until
your desired response
begins.


## 「. How to use the MODE button

If you press MODE, the receiver goes into functions mode, then the number buttons work as different function buttons.

Ex.: When number button 2 works as MO (monaural) button.


To use these buttons for original functions again after pressing MODE, wait for 5 seconds without pressing any of these buttons until the functions mode is cleared.

- Pressing MODE again also clears the functions mode.


## Control panel - KD-G116/KD-G115

## Parts identification



1 +/- buttons
2 DISP (display) button
3 Loading slot
4 Display window
5 MODE button
6 ́ (eject) button

8 山/I/ATT (standby/on/attenuator) button
9 SEL (select) button
10 MO (monaural) button
11 SSM (Strong-station Sequential Memory) button
12 CD button
13 FM/AM button
14 RPT (repeat) button
15 RND (random) button
16 EQ (equalizer) button
17 내( (control panel release) button
18 Number buttons

## Display window

19 Tuner reception indicators MO (monaural), ST (stereo)
20 CD indicator
21 RND © (disc random) indicator
22 RPT (repeat) indicator
23 LOUD (loudness) indicator
24 EQ (equalizer) indicator
25 Sound mode (C-EQ: custom equalizer) indicators
ROCK, CLASSIC, POPS, HIP HOP, JAZZ, USER

- umun also works as the time countdown indicator.
26 Main display
27 Source display
Volume level indicator


## Getting started



(1)
J/I/ATT


2


You cannot select "CD" as the playback source if there is no disc in the loading slot.

3


Volume level appears.


Adjust the sound as you want.
(See pages 12 and 13.)

## To drop the volume in a moment (ATT)

©/I/ATT


To restore the sound, press it again.

To turn off the power
©/I/ATT


## Caution on volume setting:

Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

## Canceling the display demonstrations

If no operations are done for about 20 seconds， display demonstration starts．
［Initial：DEMO ON］—see page 14.
1


2


3


4 Finish the procedure．


## To activate the display demonstration

In step $\mathbf{3}$ above．．．


To check the current clock time when the

DISP


## receiver is turned off

2 Set the hour and minute． 1 Select＂CLOCK H＂（hour），then adjust the hour．
2 Select＂CLOCK M＂（minute）， then adjust the minute．


3 Finish the procedure．


## Radio operations




Lights up when receiving an FM stereo broadcast with sufficient signal strength.


2
Start searching for a station.


When a station is received, searching stops.
To stop searching, press the same button again.

## To tune in to a station manually

In step 2 above...
1


2 Select the desired station frequencies.


When an FM stereo broadcast is hard to receive


2


Lights up when monaural mode is activated.


Reception improves, but stereo effect will be lost.

To restore the stereo effect, repeat the same procedure so that the MO indicator goes off.

## Storing stations in memory

You can preset six stations for each band.
FM station automatic presettingSSM (Strong-station Sequential Memory)
1 Select the FM band (FM1 - FM3) you want to store into.


2


3

"SSM" flashes, then disappears when automatic presetting is over.

Local FM stations with the strongest signals are searched and stored automatically in the FM band.

## Manual presetting

Ex.: Storing FM station of 92.5 MHz into the preset number 4 of the FM1 band.

1


## 2




3


Preset number flashes for a while.

## Listening to a preset station



2 Select the preset station (1-6) you want.


To check the current clock time while listening to an FM or AM station

DISP


## Disc operations

## Playing a disc



All tracks will be played repeatedly until you stop playback.


Total playing time of Total track number the inserted disc of the inserted disc


## Elapsed playing Current track time number

## To stop play and eject the disc



To fast-forward or reverse the track


Fast-forwards.

To go to the next or previous tracks


To the beginning of the current track, then the previous tracks.

To go to a particular track directly
To select a number from $01-06$ :


To select a number from $07-12$ :


## Prohibiting disc ejection

You can lock a disc in the loading slot.


To check the current clock time while
listening to a disc
DISP


To cancel the prohibition, repeat the same procedure.

## Selecting the playback modes

You can use only one of the following playback modes at a time.
1


2 Select your desired playback mode.

| Repeat play | Mode | Plays repeatedly |
| :---: | :---: | :---: |
|  | TRK RPT: RPT OFF: | The current track. <br> - RPT lights up. <br> Cancels repeat play. |
|  |  |  |

Ex.: When "TRK RPT" is selected

| Random play | Mode | Plays at random |
| :---: | :---: | :---: |
|  | DISC RND: All tracks of the current disc. <br> - RND © lights up. <br> RND OFF: Cancels random play. |  |
|  |  |  |
| Ex.: When "DISC RND" is selected |  |  |

## Sound adjustments



You can select a preset sound mode suitable to the music genre.


Ex.: When "ROCK" is selected

Indication pattern for each sound mode:


| Indication | For: |  | Preset values |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | BAS*1 $^{2}$ | TRE*2 $^{\text {LOUD*3 }}$ |  |  |
| USER | (Flat sound) | 00 | 00 | OFF |  |
| ROCK | Rock or disco <br> music | +03 | +01 | ON |  |
| CLASSIC | Classical <br> music | +01 | -02 | OFF |  |
| POPS | Light music | +04 | +01 | OFF |  |
| HIP HOP | Funk or rap <br> music | +02 | 00 | ON |  |
| JAZZ | Jazz music | +02 | +03 | OFF |  |

*1 BAS: Bass
*2 TRE: Treble
*3 LOUD: Loudness

## Adjusting the sound

You can adjust the sound characteristics to your preference.


Ex.: When "TRE" is selected
2


| Indication | To do: | Range |
| :--- | :--- | :--- |
| BAS*1 <br> (bass) | Adjust the bass. | -06 (min.) <br> to <br> +06 (max.) |
| TRE*1 <br> (treble) | Adjust the treble. | -06 (min.) <br> to <br> +06 (max.) |
| FAD*2 <br> (fader) | Adjust the front <br> and rear speaker <br> balance. | R06 (Rear <br> only) <br> to <br> F06 (Front <br> only) |
| BAL <br> (balance) | Adjust the left <br> and right speaker <br> balance. | L06 (Left <br> only) <br> to <br> R06 (Right <br> only) |
| LOUD*1 <br> (loudness) | Boost low and <br> high frequencies <br> to produce a well- <br> balanced sound at <br> low volume level. | LOUD ON <br> LOUD OFF |
| VOL*3 <br> (volume) | Adjust the <br> volume. | 00 (min.) to <br> 30 or 50 <br> (max.)* |

*1 When you adjust the bass, treble, or loudness, the adjustment you have made is stored for the currently selected sound mode (C-EQ) including "USER."
*2 If you are using a two-speaker system, set the fader level to "00."
*3 Normally the +/- buttons work as the volume control. So you do not have to select "VOL" to adjust the volume level.
*4 Depending on the amplifier gain control setting. (See page 14 for details.)

## General settings - PSM

$\square$ Basic procedure

You can change PSM (Preferred Setting Mode) items listed in the table that follows.


2 Select a PSM item.


Ex.: When you select "AMP GAIN"

3 Adjust the PSM item selected.


4 Repeat steps 2 and 3 to adjust the other PSM items if necessary.

## 5 Finish the procedure.



Indications
DEMO
Display demonstration

Selectable settings, [reference page]
DEMO ON: [Initial]; Display demonstration will be activated automatically if no operation is done for about 20 seconds, [7].
DEMO OFF: Cancels.

1-12, [7]
[Initial: 1 (1:00)]

CLOCK M
Minute adjustment
$00-59$, [7]
[Initial: 00 (1:00)]

AMP GAIN
Amplifier gain control

You can change the maximum volume level of this receiver.
LOW PWR: VOL 00 - VOL 30 (Select this if the maximum power of the speaker is less than 50 W to prevent them from damaging the speaker.)
HIGH PWR: [Initial]; VOL 00 - VOL 50

## Detaching the control panel



When detaching or attaching the control panel, be careful not to damage the connectors on the back of the control panel and on the panel holder.

## Detaching the control panel

Before detaching the control panel, be sure to turn off the power.

## 1



2


3



2

## Maintenance

## How to clean the connectors

Frequent detachment will deteriorate the connectors.
To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.


## Moisture condensation

Moisture may condense on the lens inside the CD player in the following cases:

- After starting the heater in the car.
- If it becomes very humid inside the car. Should this occur, the CD player may malfunction. In this case, eject the disc and leave the receiver turned on for a few hours until the moisture evaporates.


## How to handle discs

When removing a disc from its case, press down the center holder of the case and lift the disc out, holding it by the edges.

Center holder


- Always hold the disc by the edges. Do not touch its recording surface.
When storing a disc into its case, gently insert the disc around the center holder (with the printed surface facing up).
- Make sure to store discs into the cases after use.

Do not use the following dises:


Sticker


Sticker
residue


## More about this receiver

## Basic operations

## Turning off the power

- If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.


## Tuner operations

## Storing stations in memory

- During SSM search...
- All previously stored stations are erased and stations are stored newly.
- Received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).
- When SSM is over, the station stored in No. 1 will be automatically tuned in.
- When storing a station manually, a previously preset station is erased when a new station is stored in the same preset number.


## Disc operations

## General

- This receiver has been designed to reproduce CDs, and CD-Rs (Recordable)/ CD-RWs (Rewritable) in audio CD (CD-DA) format.
- When a disc has been loaded, selecting "CD" for the playback source starts disc play.


## Inserting a disc

- When a disc is inserted upside down, the disc automatically ejects.
- Do not insert 8 cm discs (single CD) and unusual shape discs (heart, flower, etc.) into the loading slot.


## Playing a CD-R or CD-RW

- Use only "finalized" CD-Rs or CD-RWs.
- This receiver can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some CD-Rs or CD-RWs may not play back on this receiver because of their disc characteristics, and for the following causes:
- Discs are dirty or scratched.
- Moisture condensation occurs on the lens inside the receiver.
- The pickup lens inside the receiver is dirty.
- CD-R or CD-RW on which the files are written with "Packet Write" method.
- There are improper recording conditions (missing data, etc.) or media conditions (stain, scratch, warp, etc.).
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.
- Do not use the following CD-Rs or CD-RWs:
- Discs with stickers, labels, or protective seal stuck to the surface.
- Discs on which labels can be directly printed by an ink jet printer.
Using these discs under high temperatures or high humidity may cause malfunctions or damage to discs.


## Changing the source

- If you change the source, playback also stops (without ejecting the disc).
Next time you select "CD" for the playback source, disc play starts from where it has been stopped previously.


## Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to prevent it from dust. (Disc will not play this time.)


## General settings-PSM

- If you change the "AMP GAIN" setting from "HIGH PWR" to "LOW PWR" while the volume level is set higher than "VOL 30," the receiver automatically changes the volume level to "VOL 30."


## Troubleshooting

What appears to be trouble is not always serious. Check the following points before calling a service center.

|  | Symptoms | Causes | Remedies |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 흔 } \\ & \text { ©0 } \end{aligned}$ | - Sound cannot be heard from the speakers. | The volume level is set to the minimum level. | Adjust it to the optimum level. |
|  |  | Connections are incorrect. | Check the cords and connections. |
|  | - The receiver does not work at all. | The built-in microcomputer may have functioned incorrectly due to noise, etc. | Reset the receiver (see page 2). |
| $\sum_{i k}^{k}$ | - SSM automatic presetting does not work. | Signals are too weak. | Store stations manually. |
|  | - Static noise while listening to the radio. | The antenna is not connected firmly. | Connect the antenna firmly. |
| 늘를등 | - Disc automatically ejects. | Disc is inserted upside down. | Insert the disc correctly. |
|  | - CD-R/CD-RW cannot be played back. <br> - Tracks on the CD-R/ CD-RW cannot be skipped. | CD-R/CD-RW is not finalized. | - Insert a finalized CD-R/ CD-RW. <br> - Finalize the CD-R/ CD-RW with the component which you used for recording. |
|  | - Disc can be neither played back nor ejected. | Disc is locked. | Unlock the disc (see page 11). |
|  |  | The CD player may have functioned incorrectly. | Eject the disc forcibly (see page 2). |
|  | - Disc sound is sometimes interrupted. | You are driving on rough roads. | Stop playback while driving on rough roads. |
|  |  | Disc is scratched. | Change the disc. |
|  |  | Connections are incorrect. | Check the cords and connections. |
|  | - "NO DISC" appears on the display. | No disc is in the loading slot. | Insert a disc into the loading slot. |
|  |  | Disc is inserted incorrectly. | Insert the disc correctly. |

## Specifications

## AUDIO AMPLIFIER SECTION

Maximum Power Output:
Front: 50 W per channel
Rear: 50 W per channel
Continuous Power Output (RMS):
Front: 19 W per channel into $4 \Omega, 40 \mathrm{~Hz}$ to 20000 Hz at no more than $0.8 \%$ total harmonic distortion.
Rear: 19 W per channel into $4 \Omega, 40 \mathrm{~Hz}$ to 20000 Hz at no more than $0.8 \%$ total harmonic distortion.
Load Impedance: $4 \Omega$ ( $4 \Omega$ to $8 \Omega$ allowance)
Tone Control Range:
Bass: $\pm 10 \mathrm{~dB}$ at 100 Hz
Treble: $\pm 10 \mathrm{~dB}$ at 10 kHz
Frequency Response: 40 Hz to 20000 Hz
Signal-to-Noise Ratio: 70 dB
Line-Out Level/Impedance:
$2.0 \mathrm{~V} / 20 \mathrm{k} \Omega$ load (full scale)
Output Impedance: $1 \mathrm{k} \Omega$

## TUNER SECTION

Frequency Range:
FM: $\quad 87.5 \mathrm{MHz}$ to 108.0 MHz
AM: $\quad 531 \mathrm{kHz}$ to 1602 kHz

## [FM Tuner]

Usable Sensitivity: $11.3 \mathrm{dBf}(1.0 \mu \mathrm{~V} / 75 \Omega)$
50 dB Quieting Sensitivity:
$16.3 \mathrm{dBf}(1.8 \mu \mathrm{~V} / 75 \Omega)$
Alternate Channel Selectivity ( 400 kHz ): 65 dB
Frequency Response: 40 Hz to 15000 Hz
Stereo Separation: 35 dB
Capture Ratio: 1.5 dB

## CD PLAYER SECTION

Type: Compact disc player
Signal Detection System: Non-contact optical pickup (semiconductor laser)
Number of channels: 2 channels (stereo)
Frequency Response: 5 Hz to 20000 Hz
Dynamic Range: 96 dB
Signal-to-Noise Ratio: 98 dB
Wow and Flutter: Less than measurable limit

## GENERAL

Power Requirement: Operating Voltage: DC 14.4 V (11 V to 16 V allowance)
Grounding System: Negative ground
Allowable Operating Temperature:
$0^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
Dimensions ( $\mathrm{W} \times \mathrm{H} \times \mathrm{D}$ ):
Installation Size (approx.):
$182 \mathrm{~mm} \times 52 \mathrm{~mm} \times 150 \mathrm{~mm}$ Panel Size (approx.):
$188 \mathrm{~mm} \times 58 \mathrm{~mm} \times 11 \mathrm{~mm}$
Mass (approx.):
1.3 kg (excluding accessories)

Design and specifications are subject to change without notice.

## JVC

# JVC <br> KD-G116/KD-G115 <br> Installation/Connection Manual 

 Manual Pemasangan/Penyambungan
## ENGLISH

## INDONESIA

This receiver is designed to operate on 12 V DC, NEGATIVE ground electrical systems. If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC car audio dealers.
Parts list for installation and connection
The following parts are provided for this receiver.
After checking them, please set them correctly.


(1)

Alat penerima ini didisain untuk beroperasi hanya pada 12 V DC, sistem listrik tanah NEGATIVE. Jika kendaraan anda tidak memiliki sistem ini, sebuah pembalik tegangan diperlukan, yang mana dapat dibeli di penyalur-penyalur audio mobil JVC.

## Daftar bagian-bagian untuk pemasangan dan penyambungan <br> Bagian-bagian berikut disediakan untuk alat penerima ini.

Setelah mengecek bagian-bagian tersebut, silahkan atur bagian-bagian itu.
(0)
(1)

Rubber cushion Bantalan karet

(E)

Power cord Kabel power


PEMASANGAN (BINGKAI-DALAM DASH)
Ilustrasi berikut menunjukkan sebuah tipe pemasangan. Jika anda mempunyai suatu pertanyaan atau informasi yang diperlukan mengenai alat-alat pemasangan, konsultasikan pada penyalur audio mobil JVC atau sebuah perusahaan yang mensuplai alat-alat.

- Jika anda tidak yakin bagaimana memasang alat penerima ini dengan benar, biarkan dipasang dengan teknisi yang berkualitas.


Removing the receiver
Before removing the receiver, release the rear section.


When using the optional stay / Ketika menggunakan penguat tambahan

Stay (option)
Penguat (tambahan)


Install the receiver at an angle of less than $30^{\circ}$. Pasang penerima pada suatu sudut lebih dari $30^{\circ}$.

## Memindahkan alat penerima

Sebelum memindahkan alat penerima, lepaskan seksi belakang


Insert the two handles, then pull them as illustrated so that the receiver can be removed.
Sisipkan kedua pemegang dan tarik alat penerima seperti yang diilustrasikan hingga alat penerima dapat dipindahkan.


When installing the receiver without using the sleeve / Ketika memasang alat penerima tanpa menggunakan selongsong
In a Toyota for example, first remove the car radio and install the receiver in its place. Dalam sebuah Toyota misalnya, pertama pindahkan radio mobil dan pasang alat penerima tersebut ke dalam tempatnya.


Bend the appropriate tabs to hold the sleeve firmly in place.
Bengkokkan pengait-pengait yang tepat untuk menahan selongsong secara kuat pada tempatnya.

## INDONESIA

## ELECTRICAL CONNECTIONS

To prevent short circuits, we recommend that you disconnect the battery's negative terminal and make all electrical co fore installing the receiver

- Be sure to ground this receiver to the car's chassis again after installation.


## Notes:

- Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC car audio dealer.
- It is recommended to connect to the speakers with maximum power of more than 50 W (both at the rear and at the front, with an impedance of $4 \Omega$ to $8 \Omega$ ). If the maximum power is less than 50 W , change "AMP GAIN" setting to prevent the speakers
from being damaged (see page 14 of the INSTRUCTIONS).
- To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape
The heat sink becomes very hot after use. Be careful not to touch it when removing this receiver.


## SAMBUNGAN-SAMBUNGAN LISTRIK

Untuk mencegah hubungan pendek, kami menyarankan anda memutuskan sambungan termina negatif baterai dan membuat semua sambungan-sambungan listrik sebelum memasang alat penerima.

- Pastikan untuk mentanahkan alat penerima ini ke casis mobil kembali setelah pemasangan.


## Catatan:

- Ganti sekring dengan voltase yang sudah ditetapkan. Jika sekring sering meledak, konsultasikan pada penyalur audio mobil JVC anda
- Disarankan untuk menghubungkan speker-speker dengan maksimum power lebih dari 50 W (keduanya di belakang dan di depan, dengan sebuah impedansi $4 \Omega$ sampai $8 \Omega$ ) Jika maksimum power kurang dari 50 W , ganti pengaturan "AMP GAIN" ("PENAMBAH PENGUAT") untuk mencegah speker-speker dari kerusakan (lihat halaman 14 dari BUKU PETUNJUK)
- Untuk mencegah hubungan pendek, tutup ujung-ujung terminal-terminal TIDAK DIGUNAKAN dengan pita isolasi.
- Pendingin menjadi sangat panas setelah digunakan. Hati-hati untuk tidak menyentuhnya ketika memindahkan alat penerima ini


## A Typical connections / Ciri khas sambungan-sambungan

Before connecting: Check the wiring in the vehicle carefully. Incorrect connection may cause serious damage to this receiver.
The leads of the power cord and those of the connector from the car body may be different in color.

1 Connect the colored leads of the power cord in the order specified in the illustration below.
2 Connect the antenna cord.
3 Finally connect the wiring harness to the receiver.
Sebelum penyambungan: Cek perkabelan dalam mobil dengan hati-hati. Penyambungan yang tidak benar mungkin menyebabkan kerusakan serius pada alat penerima.
Ujung dari kabel power dan beberapa konektor dari bodi mobil mungkin berbeda dalam warna
I Sambungkan ujung berwarna dari kabel power dalam urutan spesifikasi pada ilustrasi di bawah
2 Sambungkan kabel antena.
3 Akhirnya sambungkan dudukan kabel ke alat penerima.


## B Connecting the external amplifier / Menyambung penguat luar

You can connect an amplifier to upgrade your car stereo system.

- Connect the remote lead (blue with white stripe) to the remote lead of the other equipment so that it can be controlled through this receiver
Disconnect the speakers from this receiver, connect them to the amplifier. Leave the speaker leads of this receiver unused.

Anda dapat menyambung sebuah penguat dan peralatan lain untuk meningkatkan sistem stereo mobil anda.

- Sambungkan ujung jauh (biru dengan strip putih) ke ujung jauh dari peralatan lain sehingga dapat dikontrol melalui alat penerima ini.
- Putuskan sambungan sepker-speker dari alat penerima ini, sambungkan ini ke panguat. Biarkan ujung speker dari alat penerima ini tidak digunakan.

*3 Firmly attach the ground wire to the metallic body or to the chassis of the car-to the place not coated with paint (if coated with paint, remove the paint before attaching the wire). Failure to do so may cause damage to the receiver.
*3 Pasangkan dengan kuat kabel tanah ke bodi besi atau ke casis dari mobil-pada tempat yang tidak dilapisi cat (jika dilapisi cat, hilangkan cat sebelum memasang kabel). Kegagalan melakukan ini mungkin menyebabkan kerusakan pada alat penerima tersebut.


## PRECAUTIONS on power supply and speaker

## connections:

- DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the receiver will be seriously damaged.
- BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car.


## TINDAKAN-TINDAKAN PENCEGAHAN pada suplai

 power dan sambungan-sambungan speker: - JANGAN sambungkan ujung-ujung speker dari kabel powe ke baterai mobil; sebaliknya, alat penerima tersebut akan secara serius rusak.SEBELUM menyambung ujung-ujung speker dari kabel power ke speker-speker, cek perkabelan speker dalam mobil anda.


0

## JVC




For canceling the display demonstration，see page 7 ．想要取消午幕演示功能，參閱第 7 頁。

For installation and connections，refer to the separate manual．
有關安裝和連接方法，分別參閱操作手冊。

Thank you for purchasing a JVC product.
Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

## IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. CAUTION: Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED OUTSIDE THE UNIT.

| CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. | ADVARSEL : Synlig og usynlig laserstráling nảr maskinen er ảben eller interlocken fejer. Undgå direkte eksponering til strảling. | VARNING : Synlig och osynlig laserstråning när den öppnas och spärren är urkopplad. Betrakta strålen. | VARO : Avattaessa ja suojalukitus ohitetuna tai viallisena olet altinna nähvväle ja näkymätoömälle lasersäteilyle. Vältä säteen kohdistumista suoraan isseesi. (f) |
| :---: | :---: | :---: | :---: |

## Warning:

If you need to operate the receiver while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

## How to reset your unit



- This will reset the microcomputer. Your preset adjustments will also be erased.
- If a disc is loaded, it will eject. Be careful not to drop the disc.


## How to forcibly eject a disc

If a disc cannot be recognized by the receiver or cannot be ejected, ejects the disc as follows.
©/I/ATT


- If this does not work, try to reset your receiver.
- Be careful not to drop the disc when it ejects.


## Contents

How to reset your unit ..... 2
How to forcibly eject a disc ..... 2
How to read this manual ..... 4
How to use the MODE button ..... 4
Control panel
— KD-G116/KD-G115 ..... 5
Parts identification ..... 5
Getting started ..... 6
Basic operations ..... 6
Canceling the display demonstrations ..... 7
Setting the clock ..... 7
Radio operations ..... 8
Listening to the radio ..... 8
Storing stations in memory ..... 9
Listening to a preset station ..... 9
Disc operations ..... 10
Playing a disc ..... 10
Selecting the playback modes ..... 11

## *For safety....

- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.
Sound adjustments ..... 12
Selecting preset sound modes (C-EQ: custom equalizer) ..... 12
Adjusting the sound ..... 13
General settings - PSM ..... 14
Basic procedure ..... 14
Detaching the control panel ..... 15
Maintenance ..... 16
More about this receiver ..... 17

Troubleshooting

Troubleshooting .....  ..... 18 .....  ..... 18
Specifications
Specifications ..... 19 ..... 19

How to read this manual
The following methods are used to made the explanations simple and easy-to-understand:

- Some related tips and notes are explained in "More about this receiver" (see page 17).
- Button operations are mainly explained with the illustrations as follows:
Press briefly.
Press and hold until
your desired response
begins.


## 「. How to use the MODE button

If you press MODE, the receiver goes into functions mode, then the number buttons work as different function buttons.

Ex.: When number button 2 works as MO (monaural) button.


To use these buttons for original functions again after pressing MODE, wait for 5 seconds without pressing any of these buttons until the functions mode is cleared.

- Pressing MODE again also clears the functions mode.


## Control panel - KD-G116/KD-G115

## Parts identification



1 +/- buttons
2 DISP (display) button
3 Loading slot
4 Display window
5 MODE button
6 ́ (eject) button

8 山/I/ATT (standby/on/attenuator) button
9 SEL (select) button
10 MO (monaural) button
11 SSM (Strong-station Sequential Memory) button
12 CD button
13 FM/AM button
14 RPT (repeat) button
15 RND (random) button
16 EQ (equalizer) button
17 내( (control panel release) button
18 Number buttons

## Display window

19 Tuner reception indicators MO (monaural), ST (stereo)
20 CD indicator
21 RND © (disc random) indicator
22 RPT (repeat) indicator
23 LOUD (loudness) indicator
24 EQ (equalizer) indicator
25 Sound mode (C-EQ: custom equalizer) indicators
ROCK, CLASSIC, POPS, HIP HOP, JAZZ, USER

- umun also works as the time countdown indicator.
26 Main display
27 Source display
Volume level indicator


## Getting started



(1)
J/I/ATT


2


You cannot select "CD" as the playback source if there is no disc in the loading slot.

3


Volume level appears.


Adjust the sound as you want.
(See pages 12 and 13.)

## To drop the volume in a moment (ATT)

©/I/ATT


To restore the sound, press it again.

To turn off the power
©/I/ATT


## Caution on volume setting:

Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

## Canceling the display demonstrations

If no operations are done for about 20 seconds， display demonstration starts．
［Initial：DEMO ON］—see page 14.
1


2


3


4 Finish the procedure．


## To activate the display demonstration

In step $\mathbf{3}$ above．．．


To check the current clock time when the

DISP


## receiver is turned off

2 Set the hour and minute． 1 Select＂CLOCK H＂（hour），then adjust the hour．
2 Select＂CLOCK M＂（minute）， then adjust the minute．


3 Finish the procedure．


## Radio operations




Lights up when receiving an FM stereo broadcast with sufficient signal strength.


2
Start searching for a station.


When a station is received, searching stops.
To stop searching, press the same button again.

## To tune in to a station manually

In step 2 above...
1


2 Select the desired station frequencies.


When an FM stereo broadcast is hard to receive


2


Lights up when monaural mode is activated.


Reception improves, but stereo effect will be lost.

To restore the stereo effect, repeat the same procedure so that the MO indicator goes off.

## Storing stations in memory

You can preset six stations for each band.
FM station automatic presettingSSM (Strong-station Sequential Memory)
1 Select the FM band (FM1 - FM3) you want to store into.


2


3

"SSM" flashes, then disappears when automatic presetting is over.

Local FM stations with the strongest signals are searched and stored automatically in the FM band.

## Manual presetting

Ex.: Storing FM station of 92.5 MHz into the preset number 4 of the FM1 band.

1


## 2




3


Preset number flashes for a while.

## Listening to a preset station



2 Select the preset station (1-6) you want.


To check the current clock time while listening to an FM or AM station

DISP


## Disc operations

## Playing a disc



All tracks will be played repeatedly until you stop playback.


Total playing time of Total track number the inserted disc of the inserted disc


## Elapsed playing Current track time number

## To stop play and eject the disc



To fast-forward or reverse the track


Fast-forwards.

To go to the next or previous tracks


To the beginning of the current track, then the previous tracks.

To go to a particular track directly
To select a number from $01-06$ :


To select a number from $07-12$ :


## Prohibiting disc ejection

You can lock a disc in the loading slot.


To check the current clock time while
listening to a disc
DISP


To cancel the prohibition, repeat the same procedure.

## Selecting the playback modes

You can use only one of the following playback modes at a time.
1


2 Select your desired playback mode.

| Repeat play | Mode | Plays repeatedly |
| :---: | :---: | :---: |
|  | TRK RPT: RPT OFF: | The current track. <br> - RPT lights up. <br> Cancels repeat play. |
|  |  |  |

Ex.: When "TRK RPT" is selected

| Random play | Mode | Plays at random |
| :---: | :---: | :---: |
|  | DISC RND: All tracks of the current disc. <br> - RND © lights up. <br> RND OFF: Cancels random play. |  |
|  |  |  |
| Ex.: When "DISC RND" is selected |  |  |

## Sound adjustments



You can select a preset sound mode suitable to the music genre.


Ex.: When "ROCK" is selected

Indication pattern for each sound mode:


| Indication | For: |  | Preset values |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | BAS*1 $^{2}$ | TRE*2 $^{\text {LOUD*3 }}$ |  |  |
| USER | (Flat sound) | 00 | 00 | OFF |  |
| ROCK | Rock or disco <br> music | +03 | +01 | ON |  |
| CLASSIC | Classical <br> music | +01 | -02 | OFF |  |
| POPS | Light music | +04 | +01 | OFF |  |
| HIP HOP | Funk or rap <br> music | +02 | 00 | ON |  |
| JAZZ | Jazz music | +02 | +03 | OFF |  |

*1 BAS: Bass
*2 TRE: Treble
*3 LOUD: Loudness

## Adjusting the sound

You can adjust the sound characteristics to your preference.


Ex.: When "TRE" is selected
2


| Indication | To do: | Range |
| :--- | :--- | :--- |
| BAS*1 <br> (bass) | Adjust the bass. | -06 (min.) <br> to <br> +06 (max.) |
| TRE*1 <br> (treble) | Adjust the treble. | -06 (min.) <br> to <br> +06 (max.) |
| FAD*2 <br> (fader) | Adjust the front <br> and rear speaker <br> balance. | R06 (Rear <br> only) <br> to <br> F06 (Front <br> only) |
| BAL <br> (balance) | Adjust the left <br> and right speaker <br> balance. | L06 (Left <br> only) <br> to <br> R06 (Right <br> only) |
| LOUD*1 <br> (loudness) | Boost low and <br> high frequencies <br> to produce a well- <br> balanced sound at <br> low volume level. | LOUD ON <br> LOUD OFF |
| VOL*3 <br> (volume) | Adjust the <br> volume. | 00 (min.) to <br> 30 or 50 <br> (max.)* |

*1 When you adjust the bass, treble, or loudness, the adjustment you have made is stored for the currently selected sound mode (C-EQ) including "USER."
*2 If you are using a two-speaker system, set the fader level to "00."
*3 Normally the +/- buttons work as the volume control. So you do not have to select "VOL" to adjust the volume level.
*4 Depending on the amplifier gain control setting. (See page 14 for details.)

## General settings - PSM

$\square$ Basic procedure

You can change PSM (Preferred Setting Mode) items listed in the table that follows.


2 Select a PSM item.


Ex.: When you select "AMP GAIN"

3 Adjust the PSM item selected.


4 Repeat steps 2 and 3 to adjust the other PSM items if necessary.

## 5 Finish the procedure.



Indications
DEMO
Display demonstration

Selectable settings, [reference page]
DEMO ON: [Initial]; Display demonstration will be activated automatically if no operation is done for about 20 seconds, [7].
DEMO OFF: Cancels.

1-12, [7]
[Initial: 1 (1:00)]

CLOCK M
Minute adjustment
$00-59$, [7]
[Initial: 00 (1:00)]

AMP GAIN
Amplifier gain control

You can change the maximum volume level of this receiver.
LOW PWR: VOL 00 - VOL 30 (Select this if the maximum power of the speaker is less than 50 W to prevent them from damaging the speaker.)
HIGH PWR: [Initial]; VOL 00 - VOL 50

## Detaching the control panel



When detaching or attaching the control panel, be careful not to damage the connectors on the back of the control panel and on the panel holder.

## Detaching the control panel

Before detaching the control panel, be sure to turn off the power.

## 1



2


3



2

## Maintenance

## How to clean the connectors

Frequent detachment will deteriorate the connectors.
To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.


## Moisture condensation

Moisture may condense on the lens inside the CD player in the following cases:

- After starting the heater in the car.
- If it becomes very humid inside the car. Should this occur, the CD player may malfunction. In this case, eject the disc and leave the receiver turned on for a few hours until the moisture evaporates.


## How to handle discs

When removing a disc from its case, press down the center holder of the case and lift the disc out, holding it by the edges.

Center holder


- Always hold the disc by the edges. Do not touch its recording surface.
When storing a disc into its case, gently insert the disc around the center holder (with the printed surface facing up).
- Make sure to store discs into the cases after use.

Do not use the following dises:


Sticker


Sticker
residue


## More about this receiver

## Basic operations

## Turning off the power

- If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.


## Tuner operations

## Storing stations in memory

- During SSM search...
- All previously stored stations are erased and stations are stored newly.
- Received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).
- When SSM is over, the station stored in No. 1 will be automatically tuned in.
- When storing a station manually, a previously preset station is erased when a new station is stored in the same preset number.


## Disc operations

## General

- This receiver has been designed to reproduce CDs, and CD-Rs (Recordable)/ CD-RWs (Rewritable) in audio CD (CD-DA) format.
- When a disc has been loaded, selecting "CD" for the playback source starts disc play.


## Inserting a disc

- When a disc is inserted upside down, the disc automatically ejects.
- Do not insert 8 cm discs (single CD) and unusual shape discs (heart, flower, etc.) into the loading slot.


## Playing a CD-R or CD-RW

- Use only "finalized" CD-Rs or CD-RWs.
- This receiver can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some CD-Rs or CD-RWs may not play back on this receiver because of their disc characteristics, and for the following causes:
- Discs are dirty or scratched.
- Moisture condensation occurs on the lens inside the receiver.
- The pickup lens inside the receiver is dirty.
- CD-R or CD-RW on which the files are written with "Packet Write" method.
- There are improper recording conditions (missing data, etc.) or media conditions (stain, scratch, warp, etc.).
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.
- Do not use the following CD-Rs or CD-RWs:
- Discs with stickers, labels, or protective seal stuck to the surface.
- Discs on which labels can be directly printed by an ink jet printer.
Using these discs under high temperatures or high humidity may cause malfunctions or damage to discs.


## Changing the source

- If you change the source, playback also stops (without ejecting the disc).
Next time you select "CD" for the playback source, disc play starts from where it has been stopped previously.


## Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to prevent it from dust. (Disc will not play this time.)


## General settings-PSM

- If you change the "AMP GAIN" setting from "HIGH PWR" to "LOW PWR" while the volume level is set higher than "VOL 30," the receiver automatically changes the volume level to "VOL 30."


## Troubleshooting

What appears to be trouble is not always serious. Check the following points before calling a service center.

|  | Symptoms | Causes | Remedies |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 흔 } \\ & \text { ©0 } \end{aligned}$ | - Sound cannot be heard from the speakers. | The volume level is set to the minimum level. | Adjust it to the optimum level. |
|  |  | Connections are incorrect. | Check the cords and connections. |
|  | - The receiver does not work at all. | The built-in microcomputer may have functioned incorrectly due to noise, etc. | Reset the receiver (see page 2). |
| $\sum_{i k}^{k}$ | - SSM automatic presetting does not work. | Signals are too weak. | Store stations manually. |
|  | - Static noise while listening to the radio. | The antenna is not connected firmly. | Connect the antenna firmly. |
| 늘를등 | - Disc automatically ejects. | Disc is inserted upside down. | Insert the disc correctly. |
|  | - CD-R/CD-RW cannot be played back. <br> - Tracks on the CD-R/ CD-RW cannot be skipped. | CD-R/CD-RW is not finalized. | - Insert a finalized CD-R/ CD-RW. <br> - Finalize the CD-R/ CD-RW with the component which you used for recording. |
|  | - Disc can be neither played back nor ejected. | Disc is locked. | Unlock the disc (see page 11). |
|  |  | The CD player may have functioned incorrectly. | Eject the disc forcibly (see page 2). |
|  | - Disc sound is sometimes interrupted. | You are driving on rough roads. | Stop playback while driving on rough roads. |
|  |  | Disc is scratched. | Change the disc. |
|  |  | Connections are incorrect. | Check the cords and connections. |
|  | - "NO DISC" appears on the display. | No disc is in the loading slot. | Insert a disc into the loading slot. |
|  |  | Disc is inserted incorrectly. | Insert the disc correctly. |

## Specifications

## AUDIO AMPLIFIER SECTION

Maximum Power Output:
Front: 50 W per channel
Rear: 50 W per channel
Continuous Power Output (RMS):
Front: 19 W per channel into $4 \Omega, 40 \mathrm{~Hz}$ to 20000 Hz at no more than $0.8 \%$ total harmonic distortion.
Rear: 19 W per channel into $4 \Omega, 40 \mathrm{~Hz}$ to 20000 Hz at no more than $0.8 \%$ total harmonic distortion.
Load Impedance: $4 \Omega$ ( $4 \Omega$ to $8 \Omega$ allowance)
Tone Control Range:
Bass: $\pm 10 \mathrm{~dB}$ at 100 Hz
Treble: $\pm 10 \mathrm{~dB}$ at 10 kHz
Frequency Response: 40 Hz to 20000 Hz
Signal-to-Noise Ratio: 70 dB
Line-Out Level/Impedance:
$2.0 \mathrm{~V} / 20 \mathrm{k} \Omega$ load (full scale)
Output Impedance: $1 \mathrm{k} \Omega$

## TUNER SECTION

Frequency Range:
FM: $\quad 87.5 \mathrm{MHz}$ to 108.0 MHz
AM: $\quad 531 \mathrm{kHz}$ to 1602 kHz

## [FM Tuner]

Usable Sensitivity: $11.3 \mathrm{dBf}(1.0 \mu \mathrm{~V} / 75 \Omega)$
50 dB Quieting Sensitivity:
$16.3 \mathrm{dBf}(1.8 \mu \mathrm{~V} / 75 \Omega)$
Alternate Channel Selectivity ( 400 kHz ): 65 dB
Frequency Response: 40 Hz to 15000 Hz
Stereo Separation: 35 dB
Capture Ratio: 1.5 dB

## CD PLAYER SECTION

Type: Compact disc player
Signal Detection System: Non-contact optical pickup (semiconductor laser)
Number of channels: 2 channels (stereo)
Frequency Response: 5 Hz to 20000 Hz
Dynamic Range: 96 dB
Signal-to-Noise Ratio: 98 dB
Wow and Flutter: Less than measurable limit

## GENERAL

Power Requirement: Operating Voltage: DC 14.4 V (11 V to 16 V allowance)
Grounding System: Negative ground
Allowable Operating Temperature:
$0^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$
Dimensions ( $\mathrm{W} \times \mathrm{H} \times \mathrm{D}$ ):
Installation Size (approx.):
$182 \mathrm{~mm} \times 52 \mathrm{~mm} \times 150 \mathrm{~mm}$ Panel Size (approx.):
$188 \mathrm{~mm} \times 58 \mathrm{~mm} \times 11 \mathrm{~mm}$
Mass (approx.):
1.3 kg (excluding accessories)

Design and specifications are subject to change without notice.

## JVC

# JVC <br> KD－G116／KD－G1 15 <br> Installation／Connection Manual安裝／連接手冊 

## ENGLISH

This receiver is designed to operate on 12 V DC，NEGATIVE ground electrical systems．If your vehicle does not have this system，a voltage inverter is required，which can be purchased at JVC car audio dealers．

中文
本機僅可使用直流 12 V ，負極接地的電源系統。如果您的車輛沒有這一電源系統，則需要一個電壓變換器，可以在 JVC 汽車音響分銷商處買到。

## Parts list for installation and connection <br> The following parts are provided for this receiver．

After checking them，please set them correctly．


Washer（ø5）墊圈（ø5）

（G） Lock nut（M5）鎖定螺母（M5）
（C） Sleeve外套機殼

（H）
Mounting bolt（M5 x 20 mm ）緊固螺栓（M5 x 20 mm ）

用於安裝和連接的零件里
下列零件是随本機提供的。

${ }_{\text {Rubber cushion }}$橡膠防震墊

清點以後，正確的將其裝配。


Power cor

（12） 11110

## 安裝（裝設，固定在儀表板內）

下面的圖解表示了典型的安裝程序。如果您有問題，或需要有關配套元件的資料，請向 JVC 汽車音響分銷商或配套元件供應公司詢問。
－如果您不能確定如何正確地安裝本機，應請合格的技術人員來安裝。
information regarding installation kits，consult your JVC car audio dealer or a company supplying
kits．
－If you are not sure how to install this receiver correctly，have it installed by a qualified technician．


3

＊1 When you stand the receiver，be careful not to damage the fuse on the rear．
您恇起本機時，小心不要損壞底部的保險絲。

Removing the receiver
Before removing the receiver，release the rear section．


拆卸本機
在拆卸本機前，應将本機後部的固定和連接部分鬆開。

## 3

 that the receiver can be removed．按圖所示，將兩片板條型把手插入卡槽，然後輕穩地從兩側向外拉兩片把手，本機隨之拉出。When using the optional stay／若選用支摚架


Install the receiver at an angle of less than $30^{\circ}$將本機安裝在少於 $30^{\circ}$ 的角度。

When installing the receiver without using the sleeve／若不使用外套機殼安裝本機
In a Toyota for example，first remove the car radio and install the receiver in its place以豐田牌（TOYOTA）汽車為例：首先取出汽車收音機，然後将本機裝入其空出的位置。


Note ：When installing the receiver on the mounting bracket，make sure to use the 8 mm －long screws．If longe screws are used，they could damage the receiver．
注意 ：把本機安裝在托座上時，務必使用 8 mm 長的螺絲釘。如使用過長的螺絲釘，會損懐本機。

## TROUBLESHOOTING

－The fuse blows
＊Are the red and black leads connected correctly？
－Power cannot be turned on．
＊Is the yellow lead connected？
－No sound from the speakers．
＊Is the speaker output lead short－circuited？
－Sound is distorted．
＊Is the speaker output lead grounded？
＊Are the＂－＂terminals of $L$ and $R$ speakers grounded in common？
－Noise interfere with sounds．
＊Is the rear ground terminal connected to the car＇s chassis using shorter and thicker cords？
－Receiver becomes hot．
＊Is the speaker output lead grounded？
＊Are the＂－＂terminals of $L$ and $R$ speakers grounded in common？
－This receiver does not work at all．
＊Have you reset your receiver？

## 故障排除

## 保險䋽斷。

＊檢查紅色導線接頭和黑色導線接頭是否接觸正確？
－電源不能接通。
檢查黃色導線接頭是否接上？
－揚聲器沒有聲音
＊檢查揚聲器輸出導線接頭是否短路？
－聲音失真
＊檢查揚聲器輸出端子是否接地？
檢查揚聲器的左（L），右（R）端子的負極（－）是否共同接地？
－噪音干擾音響。
＊後接地端子與車身是否使用較短和較厚的電線連接？
－本機發熱。
＊檢查揚聲器輸出端子是否接地？
＊檢查揚聲器的左（ L ），右（ R ）端子的負極（ - ）是否共同接地？
－本機完全不能操作。
＊您是否已經重置您的機組？

＊Not included for this receiver．
＊不包含在本機內
Bend the appropriate tabs to hold the sleeve firmly in place．弄彎機殼的突舌，把外套機殼牢固在儀表板內。

## ElECTRICAL CONNECTIONS

## 電路連接

To prevent short circuits，we recommend that you disconnect the battery＇s negative terminal and make all electrical connections before installing the receive
－Be sure to ground this receiver to the car＇s chassis again after installation

## Notes：

－Replace the fuse with one of the specified rating．If the fuse blows frequently，consult your JVC car audio dealer．
－It is recommended to connect to the speakers with maximum power of more than 50 W （both at the rear and at the front，with an impedance of $4 \Omega$ to $8 \Omega$ ）．If the maximum power is less than 50 W ，change＂AMP GAIN＂setting to prevent the speakers from being damaged（see page 14 of the INSTRUCTIONS）．
－To prevent short－circuit，cover the terminals of the UNUSED leads with insulating tape
The heat sink becomes very hot after use．Be careful not to touch it when removing this receiver．


為防止短路，建議在安裝本機之前，斷開電池的負極，並把所有電路都連接好。
－安裝完畢後務必將本機的地線重新接至車身。
注意：
－把保險絲更換為額定負荷值的保險絲。如果保險絲經常燒壞，請向 JVC 汽車音響分銷商詢問。 －後置和前置揚聲器的最大輸入功率應大於 50 W ，其阻抗為 $4 \Omega-8 \Omega$ 。如果最大功率小於 50 W ，請調校＂AMP GAIN＂設定值，以防止揚聲器損壞。（參閱使用說明書的第 14 頁）

- 為防止電源短路，請用絕緣帶包住未使用電線的端子。
- 本機使用後，散熱片會很熱。因此，在移出本機時，小心不要觸摸散熱片。


## A Typical connections／典型的接線方法

Before connecting：Check the wiring in the vehicle carefully．Incorrect connection may cause serious damage to this receiver．
The leads of the power cord and those of the connector from the car body may be different in color．

接線前：仔細檢查汽車內的線路。不正確的接線會導致本機嚴重損壞。
電力線的引線和車身的連接器引線在顔色上可能有所不同。
1 依照下圖所示之次序連接電源線的顔色導線。
2 將天線的電線連接起來。
3 最後，把配線束的插頭插在本機上。

1 Connect the colored leads of the power cord in the order specified in the illustration below．
2 Connect the antenna cord．
3 Finally connect the wiring harness to the receiver．

Rear ground termina本機後背接地端子
 prior to installation，this lead must be connected， otherwise power cannot be turned on
本機未安裝時，進行工作狀況檢查之前，必須把這導線接上，否則不能開啟電源。


Blue with white stripe藍色帶有白色條紋

To metallic body or chassis of the car接至金屬體或汽車底盤

To a live terminal in the fuse block connecting
（bypassing the ignition switch）（constant 12 V ）
接至保險絲單元內的附屬端子，保險絲單元於車裝電池相連接
（用於旁路點火開關）（恆定 12 V ）
To an accessory terminal in the fuse block接至保險絲單元內的附屬端子


To the automatic antenna if any（ 250 mA max．）接至自動天線（若有裝設）（最大 250 mA ）


5 To the remote lead of other equipment（ 200 mA max．）連接至另一架儀器的遙控導線（最大 200 mA ）


White with black
stripe
白色帶有黑色條紋

White白色
eft speaker（front）左揚聲器（前置）

Gray Gray
灰色

Right speaker（front）右掦聲器（前置
 Green
綠色

Purple with black stripe紫色帶有黑色條紋

Left speaker（rear）左揚聲器（後置）

您可以連接功率放大器以提昇尊車的音響系統。
－將遙控導線（藍色帶有白色條紋）和其他裝置上的遙控導線連接起來
以便可以通過本機進行遙控
－將揚聲器和本機斷開，再接上功率放大器。將本機的揚聲器接線放置不用。

You can connect an amplifier to upgrade your car stereo system．
－Connect the remote lead（blue with white stripe）to the remote lead of the other equipment so that it can be controlled through this receiver．
Disconnect the speakers from this receiver，connect them to the amplifier．Leave the
speaker leads of this receiver unused．

＊3 Firmly attach the ground wire to the metallic body or to the chassis of the car－to the place not coated with paint（if coated with paint， with paint（if coated wofore attaching remove the paint before attaching the wire）．Failure to do so may
cause damage to the receiver．
＊3 將地線與金屬車體或者汽車底盤緊密連接，連接處應該沒有被油漆覆蓋（如果已塗上油漆，在連接電線 ，將油漆刮去）。如果不這樣做可能會損壞本機。

## PRECAUTIONS on power supply and speaker

## connections：

－DO NOT connect the speaker leads of the power cord to the car battery；otherwise，the receiver will be seriously damaged．
－BEFORE connecting the speaker leads of the power cord to the speakers，check the speaker wiring in your car．

## 電源和揚聲器接線注意事項：

－切勿把揚聲器導線接頭接至電池，否則本機將會嚴重損壞。



